MAYA SRIKANTH

github.com/mayasrikanth mayasrikanth.github.io

EDUCATION

California Institute of Technology (Caltech)

September 2017 - June 2021 (senior)

B.S. Computer Science, Business Economics Management

WORK EXPERIENCE

CrowdAI, San Francisco

January 2021 - May 2021

Deep Learning Intern

· Implementing and improving semi-supervised learning and self-training methods to reduce data annotation costs.

Virtualitics Inc., Pasadena

June 2019 - December 2020

VR Developer Intern

- · Worked with engineering and design teams to create an AR application for data visualization. Optimized data visualization in AR using mesh generation.
- · Lead on engineering project to integrate hand-tracking into production build for VR.

Barclays, NY

July 2020 - August 2020

Technology Developer Intern, Sales Workstation

· Monitored data centers, compiled disaster recovery report with hardware recommendations.

Programmed Java simulations for performance testing with GridGain and Apache Ignite over a variety of basic cluster topologies, compiled report for cluster computing best practices.

California Institute of Technology, Pasadena

Dec 2018 - Apr 2020

Undergraduate Researcher, Prof. Colin Camerer's group

- · Performed data analysis on purchase data to empirically model consumer habits.
- · Programmed unity WebGL simulation using Unity game engine and integrated application with web browser for use in future Caltech Neuroeconomics experiments.

RESEARCH

California Institute of Technology, CA

Jun 2019 - present

Undergraduate Researcher, Prof. R. Michael Alvarez's group, Prof. Anandkumar's group

· Worked in collaboration with Professor Alvarez's group and Prof. Anandkumar's group to develop natural language processing and AI-driven techniques for tracking the evolution of dynamic online conversations on social media platform and efficiently detecting online trolling. Developing a dynamic keyword selection algorithm utilizing word embedding models, LSTM, and vector auto-regression to discover trending hashtags and topics in online conversations.

Demonstrated performance improvement of embeddings-based keyword selection approach over conventional conversation tracking and data collection methods in current social science research. Deployed method in real-time to study online conversations involving the #MeToo movement and voting. Paper accepted to NeurIPS 2019, extended abstracts accepted to Socal ML Symposium 2020 and PolMeth 2020. Poster accepted to ICML 2020 WiML workshop for presentation. Actively working to utilize and further develop neural conversational models and our dynamic keyword methodology to build automated AI tools for countering online abuse. Research design proposal for neural conversational anti-troll Chatbot accepted to APSA 2020 for presentation.

Undergraduate Researcher, Prof. Djorgovski's Group

· Developed an interactive classroom space for higher education in Virtual Reality in Caltech's VR Labs using UX-based design principles. Technologies used include Unity game engine, C#, and vive headset. Used mesh generation to provide for doodle-board capabilities and included calibration in VR space. Presented and demoed project at Educause Learning Initiative Conference 2019.

TEACHING

California Institute of Technology (Caltech)

January 2020 - March 2020

Teaching Assistant, Department of Computing and Mathematical Sciences

· Undergraduate teaching assistant for Caltech's Data, Algorithms, and Society (CS/IDS 162), responsible for holding class discussions and office hours, as well as grading assignments.

California Institute of Technology (Caltech)

October 2020 - December 2020

Teaching Assistant, Department of Computing and Mathematical Sciences

· Undergraduate teaching assistant for Caltech's Computer Graphics Lab (CS 171), responsible for holding recitations and office hours, as well as grading assignments.

PUBLICATIONS

Workshops

- · Liu, A., **Srikanth, M.**, Adams-Cohen, N., Alvarez, M., Anandkumar, A. (2019). Finding Social Media Trolls: Dynamic Keyword Selection Methods for Rapidly Evolving Online Debates. *Conference on Neural Information Processing Systems AI for Social Good Workshop*.
- · Extended abstract with updated work accepted to 2020 Socal Machine Learning Symposium.
- · Abstract with updated work accepted to 2020 Society of Political Methodology Conference.

PRESENTATIONS

Poster Presentations

- · Srikanth, M., Adams-Cohen, Liu, A., Anandkumar, A., Alvarez, M. (2021). Predicting Social Media Discussion Trends with Artificial Intelligence. *Midwest Political Science Association Annual Conference*.
- Srikanth, M., Liu, A., Adams-Cohen, N., Alvarez, M, Anandkumar, A. (2020). Dynamic Algorithm for Social Media Troll Detection. *International Conference in Machine Learning WiMl Un-Workshop*.
- · Srikanth, M., Adams-Cohen, N., Liu, A., Anandkumar, A., Alvarez, M. (2020). Tracking Social Media Movements with Dynamic Keyword Algorithm. Society of Political Methodology Conference.
- · Srikanth, M., Adams-Cohen, N., Wang, P., Liu, A., Anandkumar, A., Alvarez, M. (2020). Artificial Intelligence Chatbot to Combat Trolling on Social Media Platforms. *American Political Science Association Conference*.
- · Lombeyda, S., Chen, L., Ravishankar, N., **Srikanth, M.,** Djorgovski, G. (2019). A Higher Ed VR Classroom: An Enhanced Reality for Teaching. *Educause Learning Initiative Conference*.

AWARDS & HONORS

- · Society of Political Methodology Undergraduate Initiative (ICPSR) Fellowship Recipient, 2020
- · Caltech Summer Undergraduate Research Fellowship Recipient, 2018
- · Awarded NSF Harvard research grant for novel work in Political Methodology

LEADERSHIP & OUTREACH

- \cdot Caltech Undergraduate Peer Advocate 2019-2020
- · Member of SWE (Society of Women Engineers)
- \cdot Writer for Caltech's Trustworthy Social Media Medium publication group